

Low Vision



AMERICAN ACADEMY
OF OPHTHALMOLOGY

What is low vision?

If ordinary eyeglasses, contact lenses or intraocular lens implants don't give you clear vision, you are said to have low vision. You should not confuse this condition with blindness. People with low vision still have useful vision that can often be improved with visual devices.

Whether your visual impairment is mild or severe, low vision generally means that your vision does not meet your needs. Using visual devices to improve your vision usually begins after your ophthalmologist has completed medical or surgical treatment or determined that such treatments will not improve your vision.

What causes low vision?

Though most often experienced by the elderly, people of all ages may be affected. Low vision can occur from birth defects, inherited diseases, injuries, diabetes, glaucoma, cataract and aging.

The most common cause is macular degeneration, a disease of the retina, the inner layer of the eye that senses light and allows you to see. Macular degeneration causes damage to central vision. It does not cause total blindness, because side (peripheral) vision is not affected.

Are there different types of low vision?

Yes. Although reduced central or reading vision is most common, low vision may also result from decreased side (peripheral) vision, or a loss of color vision. Or, your eye might lose the ability to adjust to light, contrast or glare.

Different types of low vision may require different kinds of assistance. For example, people born with low vision have different needs from those who develop low vision later in life.

What is a low vision device?

A low vision device is an apparatus that improves vision. There is no one device that restores normal vision in all circumstances, so you may need different devices for different purposes. If possible, try a device before you buy it to see if it is useful for you.

There are two types of low vision devices: optical and non-optical.

Optical low vision devices

Optical low vision devices use lenses or combinations of lenses to provide magnification. They should not be confused with standard eyeglasses. There are five main kinds of optical devices:

- **Magnifying spectacles** are stronger than ordinary glasses. When you use them, you need to hold your reading material very close; otherwise the print

is out of focus. This may feel awkward at first, but you will become used to it. They are designed for close work, so magnifying spectacles leave both hands free to hold reading material.



Hand magnifiers come in a variety of powers and shapes.

- **Hand magnifiers** are familiar to most people. With these, you can hold reading material at a normal distance. You can buy hand magnifiers in department or drug stores.
- **Stand magnifiers** rest on the reading material. Some have a self-contained light source.

- **Telescopes** are used for distance magnification. They may be hand held for viewing distant objects, or mounted in spectacles.
- **Closed-circuit television** produces an enlarged image on a television screen. With adjustable magnification and contrast, a closed-circuit television is often easier to use than other devices.

Non-optical low vision devices

- Large-print books, newspapers and magazines;
- Check-writing guides;
- Large playing cards;
- Enlarged telephone dials;
- High-contrast watch faces;
- Machines that talk (timers, clocks, computers);
- Machines that scan print and read aloud.

The simplest non-optical technique is getting closer to



Closed-circuit television systems are versatile and provide high magnification.

what you want to see. Holding reading material very close to your eyes or sitting as close as one foot from the television screen will not cause eye damage, contrary to popular belief.

Is lighting important for people with low vision?

Correct lighting is as important as a low vision device. With no eye disorder, a 60-year-old person may need twice the illumination he or she needed at 20 to comfortably perform the same task. Some lighting tips:

- Place the light source close to your reading material for

greatest visibility. High intensity lights with adjustable arms work well for this purpose.

- Visors and hat brims block annoying overhead light;
- Absorptive lenses are useful in controlling glare.

What services are available for low vision patients?

A complete eye examination by an ophthalmologist is essential. An ophthalmologist is a medical doctor (MD or DO) educated, trained and licensed to provide total eye care, including diagnosing causes of low vision and prescribing low vision devices.

Once the cause of your low vision is determined, your ophthalmologist may suggest low vision devices or may refer you to other low vision specialists or agencies for help.

Governmental and private agencies provide social services for people with low vision. These

include talking books, independent home-living instruction and, in some cases, orientation and mobility training.

For additional information contact:

- Your local state commission for the blind and visually impaired
- American Foundation for the Blind, 11 Penn Plaza, Suite 300, New York, NY 10001
(800) 232-5463
- National Association for Visually Handicapped
22 West 21st Street
New York, NY 10010
(212) 889-3141
- National Library Service for the Blind and Physically Handicapped, Library of Congress, Washington, D.C. 20542, (800) 424-8567
- The Lighthouse National Center for Vision and Aging
111 East 59th Street
New York, NY 10022
(800) 334-5497

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